

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application. Applicant has submitted a new complete claim set showing marked up claims with insertions indicated by underlining and deletions indicated by strikeouts and/or double bracketing.

Listing of Claims:

1. (Currently amended) A computer-implemented method for modifying a previously applied action in an application, the method comprising:
 - recording action information pertaining to an at least one action of
corresponding to a first computer-related source application and an associated relationship between the at least one action of the first application and with a recorded action of a second computer-related source application;
 - executing an a first action management operation on the at least one action of
the first computer-related source application, the first operation causing a first
modification to the at least one action of the first application;
 - executing a second operation on and the recorded action of the second
computer-related source application responsive to the execution of the first operation
on the at least one action of the first application and based on the relationship between
the at least one action of the first application and the recorded action of the second
application, the second operation causing a second modification to the recorded action
of the second application corresponding to the first modification to the action of the
first application.

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2. (Currently amended) The method of claim 1 further comprising:
registering the first ~~computer-related source~~ application with an action management module that receives action information about actions associated with multiple ~~computer-related sources~~ applications.
3. (Currently amended) The method of claim 1 further comprising:
registering the second ~~computer-related source~~ application with an action management module that receives action information about actions associated with multiple ~~computer-related sources~~ applications.
4. (Currently amended) The method of claim 1 further comprising:
detecting selection of the recorded action of the first ~~computer-related source~~ application from a plurality of recorded actions of the first ~~computer-related source~~ application and the second ~~computer-related source~~ application.
5. (Currently amended) The method of claim 1 further comprising:
displaying recorded actions of the first ~~computer-related source~~ application and the second ~~computer-related source~~ application in accordance with causal relationships among the recorded actions.
6. (Currently amended) The method of claim 1 further comprising:
displaying recorded actions of the first ~~computer-related source~~ application and the second ~~computer-related source~~ application in accordance with chronological relationships among the recorded actions.

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7. (Currently amended) The method of claim 1 wherein the ~~executing operation~~ first modification comprises ~~an~~[:]]

~~instructing a source-specific action management facility of the first computer-related source to undo~~ of the recorded action of the first computer-related source application, the undo causing a compensation of the action of the first application.

8. (Currently amended) The method of claim 1 wherein the ~~executing operation~~ first modification comprises a:

~~instructing a source-specific action management facility of the first computer-related source to redo~~ of the recorded action of the first computer-related source application, the redo causing an execution of a previously inactive action.

9. (Currently amended) The method of claim 1 wherein the ~~executing operation~~ first modification comprises:

~~instructing~~ replacing ~~a source-specific action management facility of the first computer-related source to replace the recorded action of the first computer-related source~~ application with another action.

10. (Currently amended) The method of claim ~~+~~ 9 wherein the ~~executing operation~~ comprises:

~~instructing a source-specific action management facility of the first computer-related source to replace the recorded action of the first computer-related source application and the other with another action~~ are of a different action type.

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11. (Currently amended) The method of claim 1 wherein the ~~executing operation~~ first modification comprises:

~~replacing instructing a source-specific action management facility of the first computer-related source to replace the recorded action of the first computer-related source~~ application with another action of the same action type having different action parameters.

12. (Currently amended) The method of claim 1 wherein the ~~executing operation~~ first modification comprises:

~~replacing instructing a source-specific action management facility of the first computer-related source to replace the recorded action of the first computer-related source~~ application with multiple actions.

13. (Currently amended) The method of claim 1 wherein the ~~second computer-related source is an application~~ step of recording at least one action includes recording a plurality of actions corresponding to the first application, the plurality of actions including the at least one action and at least one dependent action dependent on the at least one action.

14. (Currently amended) The method of claim 1 wherein the ~~second computer-related source~~ application is an inactive, ~~the method~~ application and further comprising:

executing the inactive second application responsive to ~~execution of the action management operation~~ execution of the first operation.

15. (Currently amended) The method of claim 1 wherein the ~~second computer-related source is~~ application comprises a document object.

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16. (Currently amended) The method of claim ~~4~~ 13 wherein ~~the second computer-related source is a document object~~ executing the first operation on the at least one action includes automatically executing the first operation on the at least one dependent action in response to executing the first operation on the at least one action.

17. (Currently amended) The method of claim 1 wherein the ~~second computer-related source is a computer process~~ recording includes recording a sequence of actions of the first application in a first action log and a sequence of actions of the second application in a second action log, the recorded associated relationship comprising a dependency of an action in the sequence of actions of the second application on an action in the sequence of actions of the first application,

and wherein the first operation causes a modification in the action and a subsequent action in the sequence of actions of the first application and the execution of the second operation, the second operation causing a substantially similar modification in the action in the sequence of actions of the second application.

18. (Currently amended) A computer ~~program product~~ readable storage medium encoding a computer program for executing on a computer system a computer process, the computer process comprising:

recording action information pertaining to an at least one action of
corresponding to a first computer-related source application and an associated
relationship between the at least one action of the first application and with a recorded
action of a second computer-related source application;

executing an action management operation on the at least one action of the first
computer-related source application and the recorded action of the second computer-

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~~related source~~ application based on the relationship between the at least one action of the first application and the recorded action of the second application.

wherein the at least one action of the first application and the recorded action of the second application are modified based on the action management operation.

19. (Currently amended) The computer ~~program-product~~ readable storage medium of claim 18 wherein the computer process further comprises:

registering the first ~~computer-related source~~ application with an action management module that receives action information about actions associated with multiple ~~computer-related sources~~ applications.

20. (Currently amended) The computer ~~program-product~~ readable storage medium of claim 18 wherein the computer process further comprises:

registering the second ~~computer-related source~~ application with an action management module that receives action information about actions associated with multiple ~~computer-related sources~~ applications.

21. (Currently amended) The computer ~~program-product~~ readable storage medium of claim 18 wherein the computer process further comprises:

detecting selection of the recorded action of the first ~~computer-related source~~ application from a plurality of recorded actions of the first ~~computer-related source~~ application and the second ~~computer-related source~~ application.

22. (Currently amended) The computer ~~program-product~~ readable storage medium of claim 18 wherein the computer process further comprises:

displaying recorded actions of the first ~~computer-related source~~ application and the second ~~computer-related source~~ application in accordance with causal relationships among the recorded actions.

23. (Currently amended) The computer ~~program-product~~ readable storage medium of claim 18 wherein the computer process further comprises:

displaying recorded actions of the first ~~computer-related source~~ application and the second ~~computer-related source~~ application in accordance with chronological relationships among the recorded actions.

24. (Currently amended) The computer ~~program-product~~ readable storage medium of claim 18 wherein the ~~executing-operation~~ action management operation comprises:

~~instructing a source-specific action management facility of the first computer-related source to~~ an ~~undo the recorded action of the first computer-related source.~~

25. (Currently amended) The computer ~~program-product~~ readable storage medium of claim 18 wherein the ~~executing-operation~~ action management operation comprises:

~~instructing a source-specific action management facility of the first computer-related source to~~ a ~~redo the recorded action of the first computer-related source.~~

26. (Currently amended) The computer ~~program-product~~ readable storage medium of claim 18 wherein the ~~executing-operation~~ action management operation comprises:

~~instructing a source-specific action management facility of the first computer-related source to replace~~ replacing ~~the recorded action of the first computer-related~~

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~~source application and the recorded action of the second application~~ with another action.

27. (Currently amended) The computer ~~program-product~~ readable storage medium of claim 18 wherein the ~~executing~~ action management operation comprises:

~~instructing a source-specific action management facility of the first computer-related source to replace~~ replacing the recorded action of the first computer-related ~~source application and the recorded action of the second application~~ with another action of a different action type.

28. (Currently amended) The computer ~~program-product~~ readable storage medium of claim 18 wherein the ~~executing~~ action management operation comprises:

~~instructing a source-specific action management facility of the first computer-related source to replace~~ replacing the action of the first application and the recorded action of the first computer-related source second application with another action of the same action type having different action parameters.

29. (Currently amended) The computer readable storage medium~~program-product~~ of claim 18 wherein the ~~executing~~ action management operation comprises:

~~instructing a source-specific action management facility of the first computer-related source to replace~~ replacing the action of the first application and the recorded action of the first computer-related source second application with multiple actions.

30. (Currently amended) The computer ~~program-product~~ readable storage medium of claim 18 wherein the ~~second computer-related source is an application~~ recording step includes recording a plurality of actions corresponding to the first application, the

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plurality of actions including the at least one action and a dependent action dependent on the at least one action.

31. (Currently amended) The computer ~~program-product~~ readable storage medium of claim 18 wherein the second ~~computer-related source~~ application is an inactive ~~application~~ and wherein the computer process further comprises:

executing the inactive second application responsive to execution of the action management operation.

32. (Currently amended) The computer ~~program-product~~ readable storage medium of claim 18 wherein the second ~~computer-related source~~ is application comprises a document.

33. (Currently amended) The computer ~~program-product~~ readable storage medium of claim 18 wherein the second ~~computer-related source~~ is application comprises an inactive document and the computer process further comprises:

executing an application on the inactive document responsive to execution of the action management operation.

34. (Currently amended) The computer ~~program-product~~ readable storage medium of claim ~~18~~ 30 wherein the dependent action is automatically modified responsive to modification of the at least one action of the first application ~~second computer-related source is a computer process.~~

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35. (Currently amended) A system comprising:

~~an~~ a first component comprising a first action log, the first action log including at least one action corresponding to recording action information pertaining to an action of a first computer-related source application;

a second component comprising a second action log, the second action log including an action corresponding to and an associated relationship with a recorded action of a second computer-related source application and an associated relationship with the at least one action corresponding to the first application; and

a third component comprising an action management module executing an action management operation on the action of corresponding to the first computer-related source second application and the at least one recorded action of the second first application,

wherein execution of the action management operation causes a modification of the action corresponding to the second application and a corresponding modification of the at least one action of the first application computer-related source.

36. (Currently amended) A method comprising:

recording action information for one or more logical actions of a first computer-related source and an associated relationship with a recorded logical action of a second computer-related source,

displaying the recorded action information.

37. (Currently amended) A computer ~~program product~~ readable storage medium encoding a computer program for executing on a computer system a computer process, the computer process comprising:

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recording action information for one or more logical actions of a first computer-related source and an associated relationship with a recorded logical action of a second computer-related source.

38. (Currently amended) A system comprising:

a first component comprising an action log recording action information for one or more logical actions of a first computer-related source and an associated relationship with a recorded logical action of a second computer-related source.

39. (Currently amended) A method comprising:

registering a first computer-related source ~~and with an action management module;~~

~~registering a second computer-related source with the action management module; and~~

~~recording action information relating to an~~ a first logical action applied to ~~of the~~ first computer-related source and a second logical action applied to the ~~an associated relationship with a recorded action of a second~~ computer-related source;

recording an associated relationship between the first logical action and the second logical action; and

modifying the first logical action and the second logical action based on the recorded associated relationship.

40. (Currently amended) A computer ~~program product~~ readable storage medium encoding a computer program for executing on a computer system a computer process, the computer process comprising:

registering a first computer-related source ~~and with an action management module;~~

registering a second computer-related source ~~with the action management module;~~ and

~~recording action information relating to an~~ a first logical action of applied to the first computer-related source and ~~an associated relationship with a recorded action of a~~ second logical action applied to the second computer-related source;

recording an associated relationship between the first logical action and the second logical action; and

modifying the first logical action and the second logical action based on the recorded associated relationship.

41. (Currently amended) A system comprising:

a first component comprising an action management module registering a first computer-related source ~~with an action management module and registering~~ and a second computer-related source ~~with the action management module;~~ and

a second component comprising an action log, the action log containing ~~recording~~ action information relating to an action of the first computer-related source and an associated relationship with a recorded action of a the second computer-related source.

42. (Currently amended) A method in a computer system for displaying on a display device logical actions of a first computer-related source and a second computer-related source, the method comprising:

receiving a reference to an action of a first computer-related source and an associated relationship between the action of the first computer-related source and with an action of a second computer-related source;

displaying a representation of the action of a the first computer-related source and a representation of the action of a the second computer-related source; and

displaying a representation of a the associated relationship between the action of a the first computer-related source and the action of ~~a first~~ the second computer-related source.

43. (Currently amended) ~~One or more~~ A computer-readable ~~media~~ medium storing a data structure comprising:

a first data field storing an action identifier for a primary action;
a second data field storing a source identifier for a first computer-related source associated with the action identifier;
a third data field storing a related action identifier for a related action; and
a fourth data field storing a source identifier for a second computer-related source associated with the related action identifier.

44. (Currently amended) The ~~data structure~~ computer-readable medium of claim 43 wherein the data structure further comprises ~~further comprising~~:

a fifth field storing a relationship descriptor specifying the relationship between the primary action and the related action.

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45. (Currently amended) The ~~data structure~~ computer-readable medium of claim 43 wherein the data structure further comprises ~~further comprising~~:

a fifth field storing a container action identifier identifying a container action containing the primary action within the action hierarchy.

46. (Currently amended) The ~~data structure~~ computer-readable medium of claim 43 wherein the data structure further comprises ~~further comprising~~:

a fifth field storing a component action identifier identifying a component action contained by the primary action within the action hierarchy.

47. (Currently amended) The ~~data structure~~ computer-readable medium of claim 43 wherein the data structure is recorded in an action log and further comprising:

a fifth field storing an inactive flag indicating that the primary action has been made inactive but the data structure remains persistent the action log.

48. (Currently amended) The ~~data structure~~ computer-readable medium of claim 43 wherein the data structure further comprises ~~further comprising~~:

a fifth field storing an action descriptor describing the primary action.